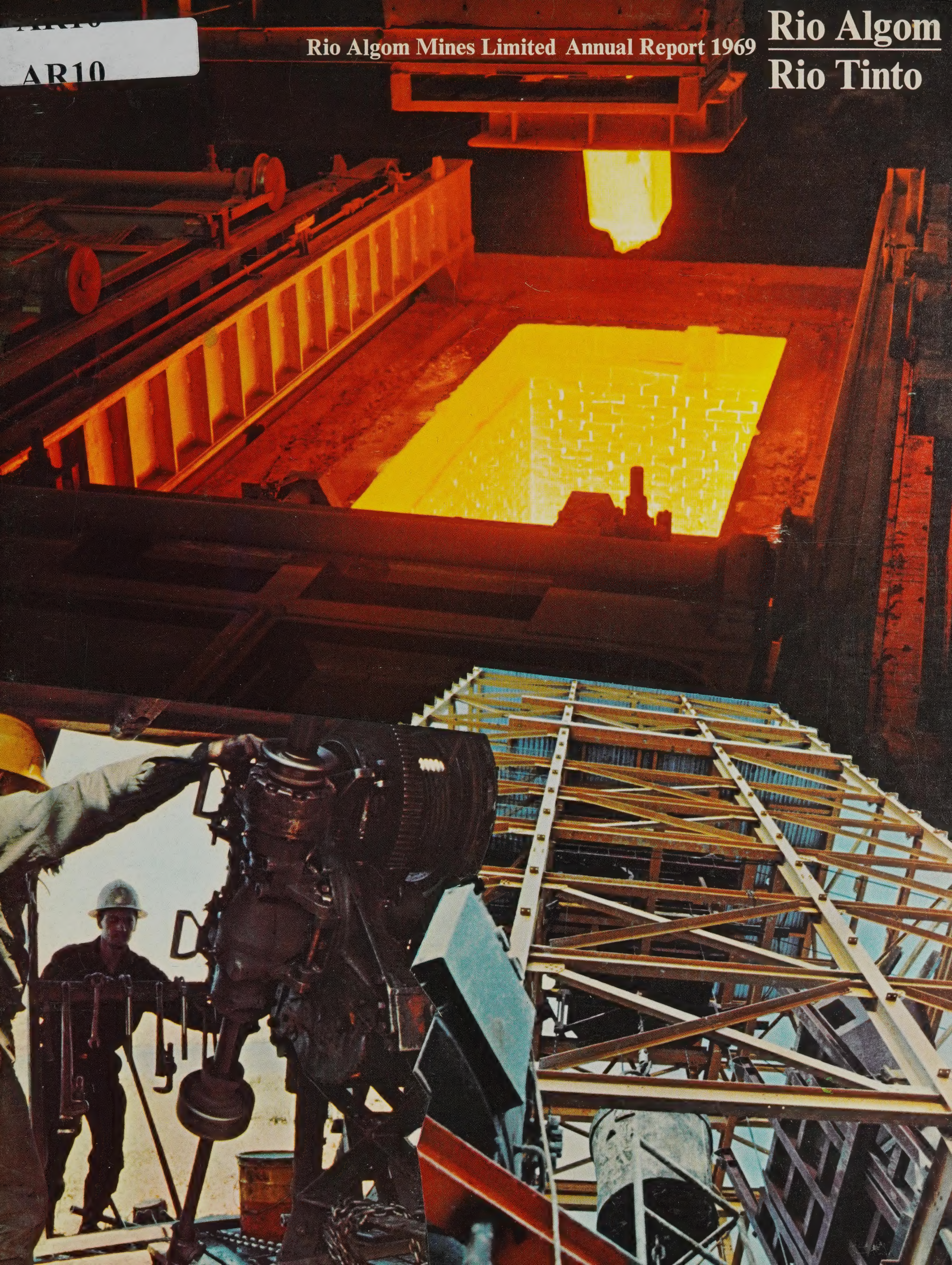
Rio Algom Mines Limited Annual Report 1969

Rio Algom
Rio Tinto



RIO ALGOM MINES LIMITED

120 Adelaide Street West
Toronto 1, Canada

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Cover: photo montage illustrating Rio Algom's stainless steelmaking, mining and exploration operations.

Highlights of the Year's Consolidated Operations

YEAR ENDED DECEMBER 31, 1969
($000's omitted)

	1969	1968
Sales	$ 173,114	$ 145,825
Net earnings	$ 15,361	$ 13,012
Per share of common stock	$ 1.18	99¢
Dividends paid on common stock	$ 4,900	$ 4,900
Per share	40¢	40¢
Working capital, year end	$ 89,821	$ 88,779
Ratio of current assets to current liabilities	4.0 to 1	4.1 to 1
Common shareholders' equity	$ 152,777	$ 143,132
Total common shares outstanding at December 31	12,249,584	12,249,584
Equity per share of common stock outstanding	$ 12.47	$ 11.68
Production		
Uranium oxide (pounds)	3,289,965	2,293,222
Copper in concentrate (pounds)	36,485,468	35,261,910
Zinc in concentrate (pounds)	1,687,599	13,559,337
Steel (tons)	161,220	147,103
Number of employees at December 31	5,555	5,445

RIO ALGOM MINES LIMITED

Officers

Sir Val Duncan	Chairman
R. D. Armstrong	President
G. R. Albino	Executive Vice-President, Corporate Staff
W. P. Arnold	Executive Vice-President, Mining Operations
O. S. Leslie	Executive Vice-President, Steel Operations
A. F. Lowell	Vice-President, Minerals Marketing
J. A. Sadler	Vice-President, Exploration
A. C. Turner	Secretary
H. A. Pakrul	Corporate Finance Manager
J. Van Netten	Treasurer

Directors

G. R. Albino	Toronto	Executive Vice-President of the Company
W. A. Arbuckle	Montreal	President, Arbuckle, Govett & Co. Ltd.
*R. D. Armstrong	Toronto	President of the Company
W. P. Arnold	Toronto	Executive Vice-President of the Company
*Henry Borden, CMG, QC	Toronto	Chairman, British Newfoundland Corporation Limited
J. Ian Crookston	Toronto	President, Nesbitt, Thomson and Company, Limited
*Sir Val Duncan, OBE	London, England	Chairman of the Company and Chairman, The Rio Tinto-Zinc Corporation Limited
J. G. Edison, QC	Toronto	Partner, Edison, Aird and Berlis
*Sam Harris	New York, U.S.A.	Partner, Strasser, Spiegelberg, Fried and Frank
L. A. Lapointe, QC	Montreal	President, Miron Company Ltd.
O. S. Leslie	St. Catharines	Executive Vice-President of the Company
*B. R. MacKenzie, QC	Toronto	Partner, Fasken & Calvin
Leo Model	New York, U.S.A.	Chairman and Chief Executive, Model, Roland & Co., Inc
F. A. Petito	New York, U.S.A.	Partner, Morgan Stanley & Co.
*J. Herbert Smith	Toronto	President, Canadian General Electric Company Limited
Sir Mark Turner	London, England	Deputy Chairman, Kleinwort, Benson Ltd.
*R. W. Wright	London, England	Deputy Chairman, The Rio Tinto-Zinc Corporation Limited

*Member of the Executive Committee

The Annual Meeting

The Company will hold its Annual Meeting on Friday, April 10, 1970 at 10:00 a.m. Eastern Standard Time, in the Ontario Room, Royal York Hotel, 100 Front Street West, Toronto, Ontario, Canada.

Directors' Report

Your Directors are pleased to submit this report on the operations and financial position of the Company for the year ended December 31, 1969.

Financial

Consolidated net earnings for 1969 were $15,361,000 as compared with consolidated net earnings of $13,012,000 for 1968. The net earnings for 1968 included extraordinary income of $4,943,000 resulting from a gain of $3,984,000 on the sale of the Company's total shareholdings of British Newfoundland Corporation Limited and Churchill Falls (Labrador) Corporation Limited and the receipt of $959,000 representing the net management fee applicable to prior years received from those companies in 1968. Net earnings per share on the average number of common shares outstanding were $1.18 in 1969 as compared with 99¢ in 1968, in both cases after provision for dividends on preference shares.

Net earnings from operations increased to $15,361,000 in 1969 from $8,069,000 in 1968. The increase of $7,292,000 is the net result of increases of $6,657,000 and $2,594,000 in Mining and Steel Division earnings respectively, partly offset by an increase of $1,959,000 in the total of corporate expenses, net interest costs and taxes. The increase in Mining Division earnings is mainly attributable to a higher level of copper prices and greater uranium production. Uranium production increased as a result of both an increased milling rate at the Quirke mill and a better average grade obtained from mining the higher grade New Quirke mine ore at a progressively higher rate; also there were no industrial stoppages in 1969 whereas in 1968 production of uranium was lost for twenty-nine days when a strike occurred at Elliot Lake. The improvement in Steel Division earnings reflects increased sales volume, a better mix of both products and markets, some price increases and improved manufacturing performance, particularly at the Tracy plant. The increase of $689,000 in Corporate expenses arises primarily because the expenses of 1968 are stated net of the receipt of a management fee applicable to that year received from British Newfoundland Corporation Limited and Churchill Falls (Labrador) Corporation Limited in accordance with a management contract which was terminated at December 31, 1968. The increased provision for taxes reflects the higher earnings of subsidiary companies.

During 1969 dividends of $859,000 on preference shares and $4,900,000 on common shares were paid. Dividends on common shares were paid at the same rate of 40¢ per share as in 1968 and represented 31.9% of consolidated net earnings. Preference dividends were $11,000 lower than in 1968 because 3,000 preference shares were purchased for cancellation during the year.

Bank loans were reduced during the year from $9,808,000 to $2,849,000. Of the reduction, $6,540,000 related to loans to Anglo-Rouyn Mines Limited and Mines de Poirier Inc. The loans of these two companies, which at their maximum totalled $13,000,000, had been reduced to $1,485,000 at the end of 1969.

Working capital increased by $1,042,000 and totalled $89,821,000 at the end of the year. The net excess of assets over liabilities increased to $167,477,000 from $158,132,000. During the year the Company and its subsidiaries expended $13,081,000 on capital projects and $2,700,000 on development projects.

Under the terms of its uranium sales contract with Eldorado Nuclear Limited net advance payments of $2,125,000 remain to be repaid; of this amount, $1,192,000 is due in 1970 and $933,000 in 1971.

Mining

The initial expansion of the Quirke mill, undertaken during the rehabilitation program, was from 3,000 to 3,700 tons per day. The mill actually has operated at a level of approximately 4,000 tons per day consistently for the past several months. Experiments have been and are being carried out to further increase mill capacity to approximately 4,500 tons per day, primarily by changes in milling practice and modest capital investment. The modifications are expected to increase the productive capacity of the existing Quirke mill facilities to the extent required to meet deliveries into the mid-1970's under present sales contracts.

In 1969, in addition to deliveries under the master contract with Eldorado Nuclear Limited, the Company's first deliveries were made under ten-year contracts with eight Japanese electric power utilities. Regular deliveries of one million pounds per year will continue through 1978. Initial deliveries were also made in 1969 to Canadian Westinghouse Co. Ltd., on a short term contract obtained

Exploration in northwest Canada, part of the Company's continent-wide exploration program.

NOT PREVIOUSLY ANNOUNCED.

late in 1968. Deliveries will commence in 1970 on the present contract with Ontario Hydro and will continue on an escalating annual basis through 1978, after which they remain on the same level through 1983.

Two new uranium orders were received during 1969, both from Japan. The first was from Kyushu Electric Power Co., Inc., covering 400,000 pounds of uranium oxide for delivery in 1972. The second, involving 55,000 pounds for delivery late in 1969, was from Mitsubishi Atomic Power Industries Inc., for use in the first Japanese Nuclear Ship.

Work to develop a new uranium mine in Utah began on site in March 1969. The total cost to bring the mine into production is estimated to be approximately $20 million (U.S.). The Company has already provided $4.8 million (U.S.) equity to the wholly-owned United States subsidiary that will operate the mine. $14.0 million (U.S.) will be loaned to the subsidiary by a banking consortium in which First National City Bank of New York is the lead bank. Operations are scheduled to begin in 1972 at an annual production rate of approximately 1,200,000 pounds of uranium oxide per year. 500,000 pounds of uranium oxide are required to be produced per year under a sales contract with Duke Power Company of Charlotte, North Carolina, starting in July 1972, and ending in June 1978. A letter of intent was received from Duke Power Company dated February 12, 1970 with respect to an additional purchase of a total of 4,900,000 pounds of uranium oxide to be delivered over a seven year period commencing July 1973.

Sinking of the ventilation shaft began in March and of the production shaft in November. Both shafts are to be sunk to a depth of 2,650 feet; at the end of the year they had reached depths of 1,498 and 432 feet respectively. Mine site plans have been completed and an access road built. General design of the mine plant has been completed, the permanent production headframe erected and most major equipment selected. The production hoist will be delivered during the summer of 1970. A preliminary mill design has been completed following process and flow sheet development by Company metallurgists.

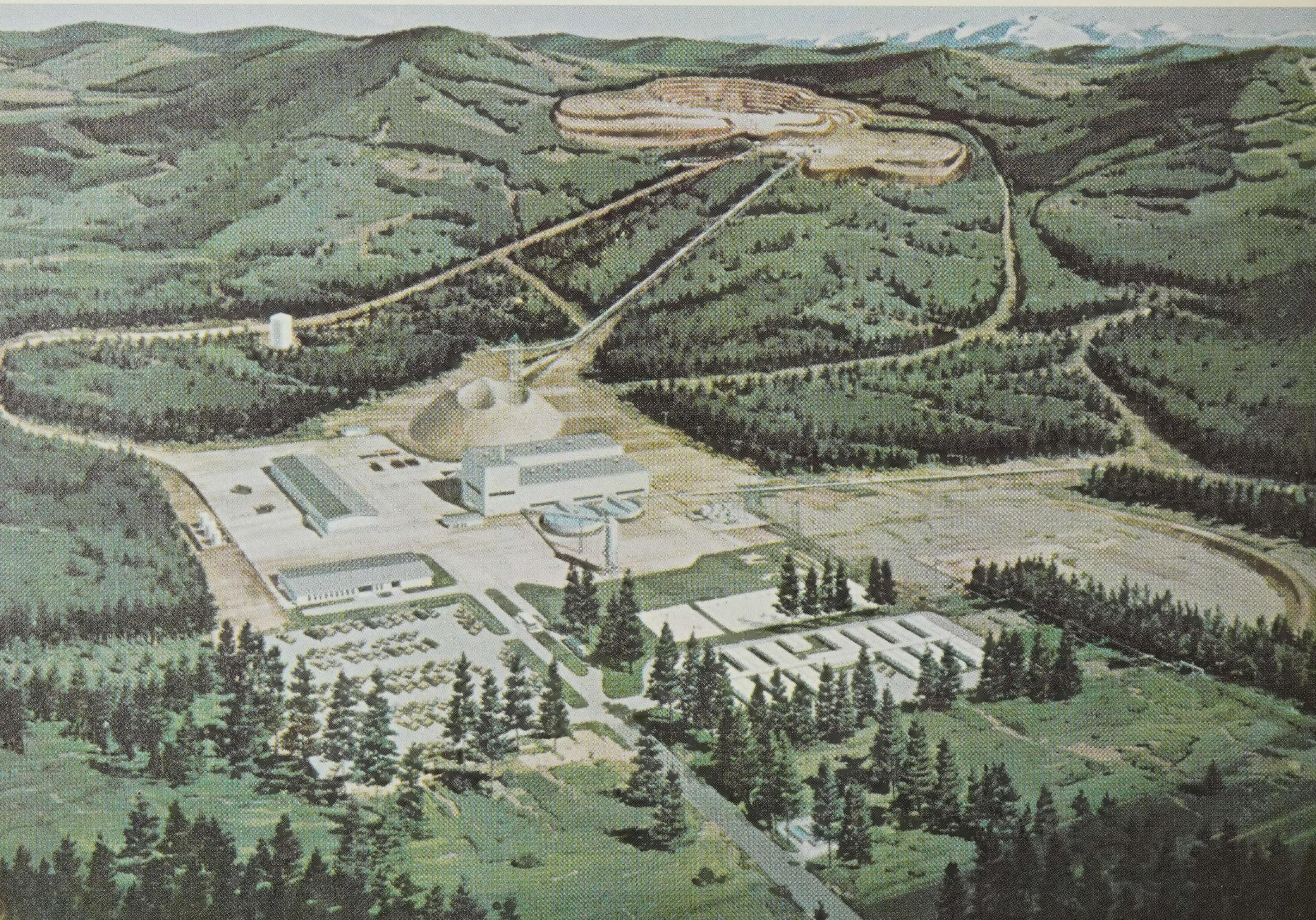
Lornex

A major event for Rio Algom in 1969 was the signing of the formal contracts for the financing of the Lornex mine in British Columbia and the sale for twelve years of the entire production of copper concentrates from the mine. The total estimated cost of bringing the mine into production, including $10.2 million spent to the end of 1969, is $123.6 million. Design capacity is 38,000 tons of ore per day and annual output is estimated at approximately 162,000 short tons of copper concentrate and 2.5 million pounds of contained molybdenum in concentrate. When in operation, Lornex will be the largest non-ferrous mine in Canada.

During December 1969, the following formal contracts were signed:

- A sales contract between Lornex and nine Japanese companies for the sale of the entire production of copper concentrates from the mine for a term of twelve years.
- A loan agreement between Lornex and the Japanese companies to purchase Lornex notes in the principal amount of $26.5 million (U.S.) secured by second mortgage bonds.

  Both the sales contract and loan agreement are subject to Japanese government approval.
- An agreement between Lornex and three Canadian banks, Canadian Imperial Bank of Commerce, The Toronto-Dominion Bank and Bank of Montreal, for advances of $60 million (Cdn.) secured by first mortgage bonds.
- An agreement between Lornex and Rio Algom and The Yukon Consolidated Gold Corporation Limited for the sale of units of unsecured income debentures and Lornex shares of $23.6 million in total, of which 90% will be subscribed by Rio Algom and 10% by Yukon.
- A construction and management agreement between Rio Algom and Lornex under which Rio Algom has agreed to assume the responsibility for the construction of the Lornex Project and supervise and manage the business and operations of Lornex during construction and thereafter for a period of at least fifteen years from December 1, 1969. Rio Algom will incur on behalf of Lornex all defined construction period costs and those operating costs incurred during the first two years following commencement of commercial production. Rio Algom's obligation to do work or incur further expenses without being reim-

Utah uranium mine in the making: 138-feet-high headframe dominates production shaft site. Production and ventilation shafts, now well underway, are to be 2,650 feet deep.

Artist's conception of the Lornex open-pit, copper-mining operation in British Columbia's Highland Valley. Formal sales and financing contracts were signed in 1969.

bursed in cash is suspended if construction period costs incurred exceed by $20,000,000 the amount for which Rio Algom has been reimbursed in cash, or, in the alternative, if construction period costs together with operating period costs in the aggregate exceed by $30,000,000 the amount for which Rio Algom has been reimbursed in cash until Rio Algom is satisfied that it will be reimbursed in cash by Lornex for such work or expenses. Rio Algom will receive a management fee of $250,000 per year commencing January 1, 1969.

When Rio Algom purchases $21,240,000 of Lornex income debentures and shares, its current 36% interest in Lornex will be increased to 50%.

Definitive engineering for Lornex is currently underway, as is detailed planning for the many other aspects of this major project. Selection of long lead time equipment has been made and contingent orders placed where necessary. Key staff for the project has been assembled so that construction can begin in an orderly manner when Japanese Government approval is received. Production is expected to begin in 1972.

In order to finance the Lornex project to the time that construction begins, Rio Algom and Yukon have agreed to advance, including amounts already advanced, up to $5,400,000 and $600,000 respectively to Lornex on a demand loan basis. Repayment will be made from the first proceeds received by Lornex from the sale of income debentures to Rio Algom and Yukon.

Exploration

Exploration work carried out by the Company and its subsidiaries on their own account and through participation in joint exploration with others was expanded in the year. The search for new orebodies was concentrated on uranium and base metal prospects in Canada and the United States. A major search for coking coal in the eastern foothills of the Rocky Mountains was initiated early in the year. The exploration organization has recently been reorganized and strengthened to provide for the most effective implementation of our rapidly expanding programs and to aggressively seek new exploration opportunities. The level of expenditure in 1969 increased to $1,621,000, from $1,257,000 in 1968 and $1,026,000 in 1967. Expenditures in 1970 are expected to increase over the 1969 level, reflecting a further intensification and broadening of several large-scale programs. In most of these major programs the Company is in partnership with Japanese or Canadian companies.

Steel

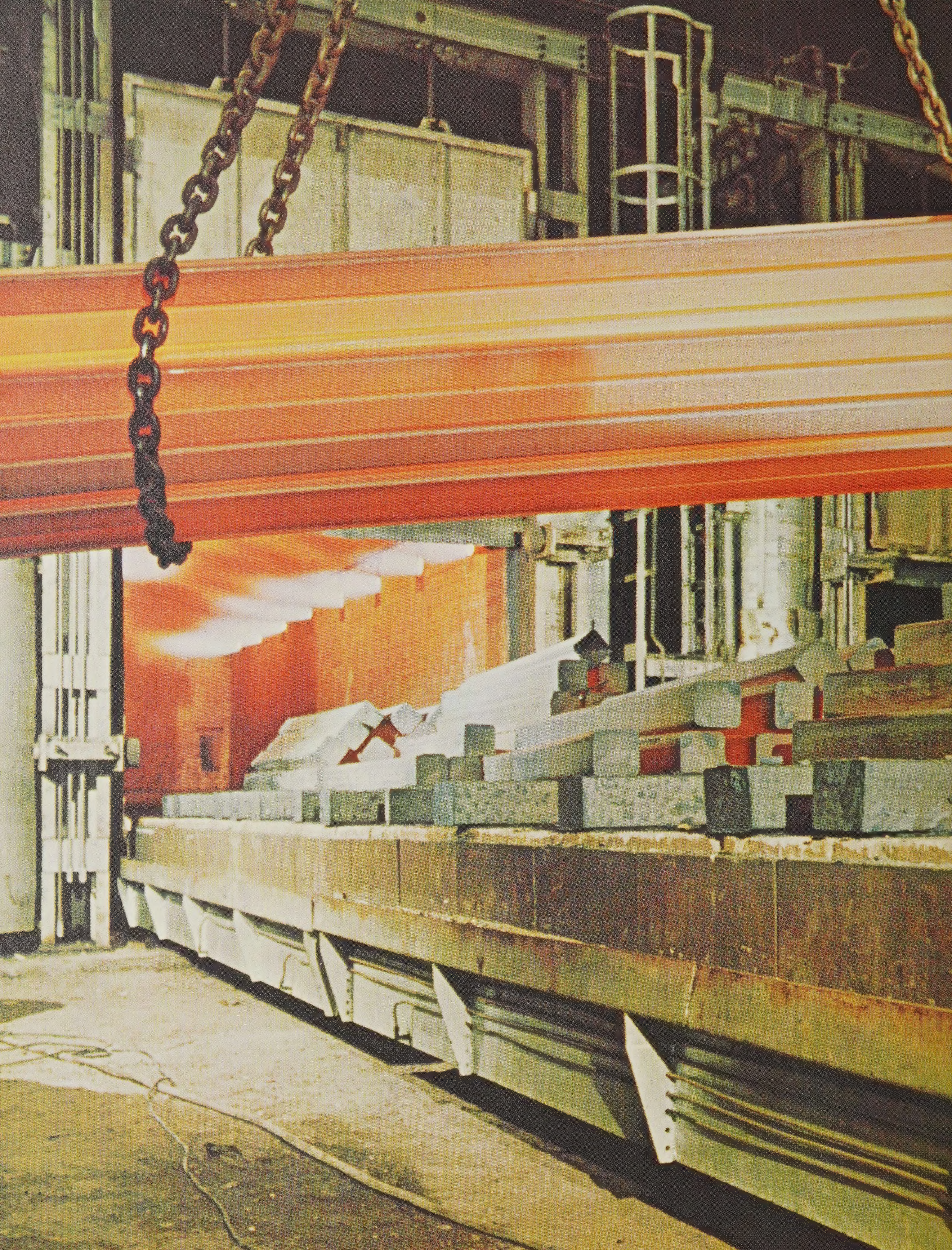
The record sales level attained in the year reflects the high level of demand for all products throughout the year and an improved mix, both of product and markets, together with some price increases. A substantial increase in sales of stainless flat rolled product from the Tracy plant was again a significant factor in the further improvement in the Steel Division operating earnings. The Welland plant also contributed to the improvement as sales of its products were higher and a significant upgrading of product mix was achieved. The nickel shortage in the last half of the year made it necessary to cut back production of high nickel-bearing steels but overall production schedules were maintained through customer acceptance of lower nickel and non nickel-bearing products and by maximum utilization of nickel supplies available.

The major long-term program to modernize the Welland plant, initiated in 1967, continued on schedule. Major units installed were five new soaking pits at the blooming mill and new heating and dispositioning furnaces at the billet and bar operation. A new building for expansion of the cold draw facilities was completed, with installation of equipment and operation planned for the first half of 1970. These and similar facilities are essential for the improvement of the basic steel-making capability and to achieve the basic objective of improving technological capability, reducing costs and upgrading the product mix at the Welland plant. The program will continue through 1970 and several subsequent years.

Future Outlook

Mining

In the past year there have been delays, particularly in the United States, in bringing new nuclear plants to completion on schedule. Largely as a result of this, there have been delays in ordering new plants, although the pace



Steel bars enter Atlas Steels' new dispositioning furnace where they are systematically cooled prior to further treatment. Installation of the furnace is part of the Welland plant's capital works program which will continue in 1970 and subsequent years.

appeared to improve in the closing months of the year. However, the long-term growth in world-wide demand for uranium continues to be as encouraging as ever, after taking into account the relatively lower level of reactor sales in the U.S. in 1969. Actually, the outlook for nuclear power in other parts of the world, particularly the European continent and Japan, appeared brighter in 1969. On balance, we see no reason for modifying our optimism about the long-term future for nuclear power.

Further, the Company's large uncommitted uranium reserves and flexible production capability in Canada place it in a most favourable position to benefit as the world demand for uranium develops. Few other companies are able to offer large quantities of uranium into the 1980's from a source as stable as from the Company's properties in Canada. The development of the Utah mine, the production from which is substantially committed, is of major importance since it establishes the Company as a supplier in the United States market, the world's largest single market. The Company and its subsidiaries expanded the search for new uranium ore reserves in Canada and the United States last year reflecting confidence in the future uranium market.

In regard to our other mines, the operating results and the development work done at Mines de Poirier in 1969 were highly encouraging. The grade of ore milled increased significantly and reserves improved both in tonnage and grade. This should extend the life of the mine and assure its continued profitability.

Steel

Demand for the Company's stainless and specialty steel products is expected to remain strong in 1970. Stainless steel sales are running at an all-time high with the current nickel shortage contributing to the build-up of substantial backlogs in these products. The total company order backlog going into the new year was 42% higher than the backlog at the beginning of 1969 and should provide a solid base for sales in 1970. The strong sales picture, however, is accompanied by major increases in costs.

Increases in the cost of nickel and other raw materials necessitated an increase in the price of all of the Company's stainless products effective December 29, 1969. Price increases were also announced late in 1969 on alloy steel products sold by the Company. Management will continue to watch this situation very closely as the year progresses. The strong sales outlook, a further increase in production at the Tracy plant and the modernization program at the Welland plant are expected to contribute to further improvement in Steel Division earnings if economic conditions remain favourable.

Organization

In May, your Directors lost an esteemed colleague in the sudden death of Mr. Donald Gordon, C.C., C.M.G., who had been a Director of the Company since March 1967. In November, a sad loss was suffered in the tragic death of Mr. D. J. McParland, who was a victim of an air crash in Labrador. Mr. McParland rendered most valuable services to the Company, rising from an engineer to Chief Engineer and becoming a Director of the Company in March 1967. At the time of his death, Mr. McParland was President and Chief Executive Officer of British Newfoundland Corporation Limited and Churchill Falls (Labrador) Corporation Limited.

It is intended that one vacancy on the Board of Directors will be filled by Mr. William D. Mulholland, President and Chief Executive Officer of British Newfoundland Corporation Limited and President of Churchill Falls (Labrador) Corporation Limited. You will be asked at the Annual and General Meeting to authorize a decrease in the Board of Directors from nineteen members to eighteen.

During the year, Mr. A. F. Lowell, formerly Marketing Manager, Mineral Products, was appointed Vice-President, Minerals Marketing. Mr. J. A. Sadler, President of the Company's exploration company, Rio Tinto Canadian Exploration Limited, has been appointed Vice-President, Exploration of the Company. This appointment was recently made in recognition of the increased scope and responsibilities relating to exploration programs.

The Directors of your Company wish to express their thanks to all officers and employees of the Company and its associated companies for their effective efforts during the past year.

On behalf of the Board
R. D. Armstrong
President

Toronto, Canada,
February 27, 1970

Lornex sales and financing contracts were signed by senior executives of a consortium of Japanese companies and Lornex Mining Corporation Ltd. In photo above, N. Shudo (at head of table), representative director of Rio Tinto-Zinc (Japan) Limited, translates address given by R. D. Armstrong, president, Rio Algom Mines and Lornex Mining Corporation. The contracts were signed for Lornex by G. R. Albino (at Mr. Shudo's left), Rio Algom executive vice-president and Lornex director, and by Mr. Armstrong. In photo below, bank loan agreement is signed by Mr. Armstrong.

Auditors' Report

To the Shareholders of Rio Algom Mines Limited:

We have examined the consolidated statement of financial position of Rio Algom Mines Limited as at December 31, 1969 and the consolidated statements of earnings, retained earnings, contributed surplus and source and disposition of funds for the year then ended. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion these consolidated financial statements present fairly the financial position of the companies as at December 31, 1969 and the results of their operations and the source and disposition of their funds for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Toronto, Canada,
February 20, 1970

COOPERS & LYBRAND
Chartered Accountants

RIO ALGOM MINES LIMITED

(Incorporated under the laws of Ontario)

Consolidated Statement of Financial Position

DECEMBER 31, 1969

($000's omitted)

	1969	*1968*
CURRENT ASSETS:		
Cash	$ 2,294	*$ 2,976*
Short term investments, at cost, and deposits	29,511	*37,599*
Marketable securities, at cost less reserve of $600,000 (note 8) (market value, 1969—$779,000; 1968—$739,000)	442	*442*
Receivables	35,518	*26,059*
Due from affiliated and associated companies	231	*230*
Inventories and concentrates awaiting shipment (note 2)	48,976	*48,977*
Prepaid expenses	2,404	*1,150*
Total	119,376	*117,433*
Less:		
CURRENT LIABILITIES:		
Bank loans (note 3)	2,849	*9,808*
Accounts payable and accrued liabilities	23,063	*17,674*
Due to affiliated and associated companies	171	*126*
Provision for income taxes including Provincial mining taxes	2,067	*829*
Preference share dividend payable January 1	213	*217*
Long term debt due within one year (note 7)	1,192	—
Total	29,555	*28,654*
WORKING CAPITAL	89,821	*88,779*
Shares in associated companies, at cost less provision for losses	42	*42*
Plant and equipment, less depreciation (note 4)	76,401	*74,952*
Mining properties and preproduction expenditures, less amortization (note 5)	19,117	*15,958*
Other costs applicable to future periods (note 6)	20,721	*19,634*
TOTAL ASSETS LESS CURRENT LIABILITIES	206,102	*199,365*
Deduct:		
Long term debt (note 7)	36,933	*40,125*
Minority shareholders' interests in subsidiary companies	1,692	*1,108*
	38,625	*41,233*
EXCESS OF ASSETS OVER LIABILITIES	$167,477	*$158,132*
OWNERSHIP EVIDENCED BY (note 8):		
Capital stock	$ 87,138	*$ 87,438*
Contributed surplus	19,424	*19,381*
Retained earnings	60,915	*51,313*
Total	$167,477	*$158,132*

Approved on behalf of the Board:

Val Duncan, Director R. D. Armstrong, Director

Consolidated Statement of Earnings

YEAR ENDED DECEMBER 31, 1969

($000's omitted)

	1969		1968	
REVENUE:				
Revenue from mine production, sales of steel and other products	$173,114		*$145,825*	
Investment and other income	2,267		*2,455*	
	175,381		*148,280*	
EXPENSES:				
Cost of production, selling, general and administrative expenses	144,005		*123,744*	
Interest and amortization of discount and financing expenses (note 6)	2,722		*3,197*	
Depreciation and amortization (notes 4, 5, 6 and 12)	9,521		*11,276*	
Exploration expenditures	1,621		*1,257*	
	157,869		*139,474*	
	17,512		*8,806*	
Provision for income taxes including Provincial mining taxes (note 10)	1,563		*481*	
Earnings before adjustment for minority interests in subsidiary companies	15,949		*8,325*	
Minority interests in profits of subsidiaries	588		*256*	
NET EARNINGS FROM OPERATIONS	15,361		*8,069*	
Earnings per common share before extraordinary items		$1.18		*59¢*
Extraordinary items:				
Gain on sale of investments	—		*3,984*	
Management fee applicable to prior years, less interim payments	—		*959*	
	—		*4,943*	
NET EARNINGS FOR THE YEAR	$ 15,361		*$ 13,012*	
Net earnings per common share		$1.18		*99¢*

Consolidated Statement of Retained Earnings

YEAR ENDED DECEMBER 31, 1969

($000's omitted)

	1969	*1968*
BALANCE, beginning of year	$ 51,313	*$ 44,071*
Net earnings for the year	15,361	*13,012*
	66,674	*57,083*
DEDUCT:		
Dividends on preference shares	859	*870*
Dividends on common shares	4,900	*4,900*
	5,759	*5,770*
BALANCE, end of year	$ 60,915	*$ 51,313*

Consolidated Statement of Contributed Surplus

YEAR ENDED DECEMBER 31, 1969

($000's omitted)

	1969	*1968*
BALANCE, beginning of year	$ 19,381	*$ 19,381*
Profit on purchase of preference shares for cancellation (note 8)	43	—
BALANCE, end of year	$ 19,424	*$ 19,381*

Consolidated Statement of Source and Disposition of Funds

YEAR ENDED DECEMBER 31, 1969

($000's omitted)

	1969	*1968*
SOURCE OF FUNDS:		
Net earnings for the year	$ 15,361	*$ 13,012*
Add depreciation, amortization and other charges (net) to operations not involving current outlay of funds	10,670	*12,046*
Total from operations	26,031	*25,058*
Investments in associated companies (net)	—	*9,555*
Issue of common shares	—	*11*
	26,031	*34,624*
DISPOSITION OF FUNDS:		
Expenditures (net) for plant and equipment and preproduction	13,081	*13,131*
Increase in development projects	2,700	*685*
Dividends on preference shares	859	*870*
Dividends on common shares	4,900	*4,900*
Reduction of long term debt	2,000	*2,000*
Reduction of long term advances	1,192	—
Purchase of preference shares for cancellation	257	—
	24,989	*21,586*
INCREASE IN WORKING CAPITAL	$ 1,042	*$ 13,038*

Notes to Consolidated Financial Statements

DECEMBER 31, 1969

1. BASIS OF CONSOLIDATION

The consolidated financial statements include the accounts of all subsidiary companies except the following:

(i) Wholly-owned housing companies which have been excluded because the investment is of doubtful value. The investment in the housing companies has been completely amortized. The losses of these companies in the year 1969 amounted to $22,150; and

(ii) Partially owned companies which have been excluded because the companies are inactive or are in the exploration and development stage and have had no profits or losses since acquisition.

The accounts of consolidated foreign companies are stated in Canadian dollars on the following basis:

Plant and equipment and related depreciation, mining properties and preproduction expenditures at exchange rates in effect at date of acquisition;

Long term advances and capital stock at rates in effect at time of transactions;

Other assets and liabilities at year end rates; and

Revenues and expenses (other than depreciation) at average rates in effect during the year.

2. INVENTORIES AND CONCENTRATES AWAITING SHIPMENT

These consist of:

	1969	1968
Inventories—		
Steel, other metals, raw materials and supplies	$41,972,804	$42,697,023
Mine supplies	3,020,684	3,005,787
Total inventories	44,993,488	45,702,810
Concentrates awaiting shipment	3,982,880	3,274,426
	$48,976,368	$48,977,236

Inventories of steel, other metals, raw materials and supplies are valued at the lower of cost and market. Cost is determined generally at average or standard costs which approximate actual. Market for steel and other metals is net realizable value and for raw materials and supplies is replacement cost. Intercompany profits have been excluded from these inventories. Mine supplies are valued at cost less provision for loss on disposal of surplus supplies.

Concentrates awaiting shipment are valued at selling price.

3. BANK LOANS

Mines de Poirier Inc., consolidated and wholly-owned by the company, had a bank loan of $935,000 at December 31, 1969 (since paid) secured by the pledge of a debenture issued under a trust deed of hypothec, mortgage and pledge charging the undertaking and all the assets of that company.

Anglo-Rouyn Mines Limited, consolidated and 58% owned by the company, had a bank loan of $550,000 at December 31, 1969 secured by way of assignment of ore concentrates, supplies, etc., under Section 88 of the Bank Act, a registered general assignment of accounts receivable and a first mortgage bond of $4,100,000.

4. PLANT AND EQUIPMENT

Plant and equipment consists of:

	1969	1968
Buildings, machinery and equipment and construction in progress, at cost	$249,394,748	$242,402,396
Less accumulated depreciation	175,137,364	169,525,134
	74,257,384	72,877,262
Land, at cost	2,143,299	2,074,659
	$ 76,400,683	$ 74,951,921

The following accounting policies are being followed in connection with the depreciation charges of the company:

(i) Fixed assets of the Mining Division:
Depreciation is being provided on fixed assets on the basis of the shorter of physical life or economic life, as estimated for the individual mining units, the economic life to be adjusted from time to time as conditions warrant.

(ii) Fixed assets of the Steel Division:
Fixed assets are being depreciated on the straight line method based on engineering estimates of the lives of the assets at the following rates:

Buildings	4% per annum
Plant and equipment	6-2/3% per annum

5. MINING PROPERTIES AND PREPRODUCTION EXPENDITURES

These consist of:

	1969	1968
Mining properties, at cost	$ 6,931,852	$ 6,594,317
Less accumulated amortization	5,852,548	5,830,425
	1,079,304	763,892
Preproduction expenditures, at cost less amortization	18,037,315	15,194,154
	$19,116,619	$15,958,046

Mining properties and preproduction expenditures are being amortized on the same basis as depreciation is being provided, as described in Note 4 (i).

6. OTHER COSTS APPLICABLE TO FUTURE PERIODS

This includes the following:

	1969	1968
Development projects, at cost	$ 5,862,738	$ 3,162,738
Discount and financing expenses, at cost less amortization	1,252,468	1,818,197
Excess of acquisition cost over adjusted book value of Atlas Steels assets, less amortization	13,606,192	14,653,292
	$20,721,398	$19,634,227

The following accounting policies are being followed in connection with amortization of other costs applicable to future periods:

(i) Development projects are carried forward as assets while the projects are considered to be of value to the company. All exploration expenditures have been written off;

(ii) Discount and financing expenses are being amortized on a straight line basis over the life of the Sinking Fund Debentures of the company, which mature on April 1, 1983. Discounts realized on purchase for redemption of debentures have been applied to reduce the unamortized balance of discount and financing expenses; and

(iii) Excess of acquisition cost over adjusted book value of Atlas Steels assets is being amortized on a straight line basis over a 20 year period which commenced January 1, 1963.

7. LONG TERM DEBT

	1969	1968
Advances on future deliveries of uranium concentrates	$ 2,125,000	$ 2,125,000
Less portion included in current liabilities	1,192,154	—
	932,846	2,125,000
5¾% Sinking Fund Debentures Series A, maturing on April 1, 1983	36,000,000	38,000,000
	$36,932,846	$40,125,000

At December 31, 1969 the advance payments received from Eldorado Nuclear Limited on the account of future deliveries of uranium concentrates totalled $2,125,000 collaterally secured by $2,941,178 issued and outstanding Non-Interest-Bearing Performance Bonds due March 31, 1974. The Performance Bonds are secured by a charge on the uranium assets of the company located at Elliot Lake and uranium concentrates produced but not delivered. As the deferred poundage is delivered the Bonds are being surrendered to the company. The advances of $2,125,000 are repayable in 1970 and 1971.

The company has agreed to make sinking fund payments for the retirement of the Sinking Fund Debentures as follows:

$2,000,000 on October 1 in each of the years 1970 to 1978; and
$2,500,000 on October 1 in each of the years 1979 to 1982.

At December 31, 1969, $2,000,000 principal amount had been purchased to meet the sinking fund requirements in 1970.

8. OWNERSHIP

Ownership was evidenced by:

	1969	1968
Capital stock		
Authorized:		
497,000 First Preference Shares with a par value of $100 each, issuable in series		
15,000,000 Common Shares without par value		
Issued:		
147,000 $5.80 Cumulative Redeemable First Preference Shares Series A (150,000 at December 31, 1968) (redeemable at premiums ranging from 5¾% to 1%)	$ 14,700,000	$ 15,000,000
12,249,584 Common Shares	72,437,504	72,437,504
	87,137,504	87,437,504
Contributed surplus	19,424,039	19,381,472
Retained earnings	60,915,006	51,313,400
Total	$167,476,549	$158,132,376

(i) During the year:

(a) 3,000 First Preference Shares were purchased for cancellation and retained earnings includes an amount of $42,567 which has been set aside as a retirement fund for the purchase for cancellation or redemption of Series A preference shares, thereby satisfying the company's 1969 obligation referred to in Note 9 (iv) below; and

(b) The discounts realized on purchase for cancellation of the First Preference Shares of $42,567 were credited to Contributed Surplus.

(ii) At December 31, 1969, 247,829 Common Shares were reserved:

(a) 99,600 shares under a Stock Option Plan. Outstanding options have been granted to employees to purchase:

20,100 shares at a price of $24.64 per share on or before March 30, 1977; and
32,500 shares at a price of $28.35 per share on or before April 1, 1978 (options on 3,000 shares were extinguished during 1969).

(b) 148,229 shares for holders of Series C Warrants, issuable at $22.25 per share on or before April 1, 1971.

(iii) In 1967 an amount of $600,000 was appropriated from retained earnings as a reserve to reduce the carrying value of marketable securities to approximate market value at December 31, 1967. The reserve will be restored to retained earnings when such marketable securities are sold at which time any gain or loss will be recorded in earnings.

(iv) There are restrictions on the payment of dividends in the provisions attaching to the $5.80 Cumulative Redeemable First Preference Shares Series A and the company's trust indenture relating to the Series A Debentures contains certain covenants

which limit the payment of any dividends as well as the assumption of additional long term liabilities.

9. COMMITMENTS AND CONTINGENT LIABILITIES

The following commitments and contingent liabilities were outstanding at December 31, 1969:

(i) Estimated total cost to complete capital projects, excluding the Utah mine, was approximately $3,400,000 (committed approximately $2,200,000);

(ii) A wholly-owned subsidiary of the company intends to spend an additional amount of approximately $15,000,000 (being financed by bank loans) to bring its Utah uranium property into production; of this amount approximately $3,750,000 is committed;

(iii) Minimum annual rentals upon real property leased to the company and/or its subsidiaries with original terms extending beyond December 31, 1972, exclusive of certain expenses such as real estate taxes, insurance, etc. amounted to approximately $593,000. The leases are for varying periods, the longest lease extending to 1990, and include options for renewal;

(iv) The company is obligated on April 1 in each year to set aside as a retirement fund, subject to certain limitations, an amount equal to 2% of the original aggregate par value of the Preference Shares Series A. The retirement fund will be used to purchase or redeem Preference Shares Series A subject to certain limitations (note 8 (i));

(v) At December 31, 1969 the company was contingently liable in the amount of $7,310,000 (U.S.) for drafts under discount at that date. These drafts were honoured on their due date, January 5, 1970;

(vi) Pending final approval by the Japanese government and the shareholders of Lornex Mining Corporation Ltd. the company has agreed to purchase $21,240,000 of income debentures and Lornex shares. In order to finance the Lornex project to the time that construction begins, the company has agreed to advance $5,400,000 to Lornex on a demand loan basis; of this amount $2,700,000 had been advanced at December 31, 1969. Repayment of these loans will be made from the first proceeds received by Lornex from the aforementioned sale of income debentures.

The company has also agreed to incur on behalf of Lornex all defined construction period costs and those operating costs incurred during the first two years following commencement of commercial production. The company's obligation to do work or incur further expenses without being reimbursed in cash is suspended if construction period costs incurred exceed by $20,000,000 the amount for which the company has been reimbursed in cash, or, in the alternative, if construction period costs together with operating period costs in the aggregate exceed by $30,000,000 the amount for which the company has been reimbursed in cash until the company is satisfied that it will be reimbursed in cash by Lornex for such work or expenses; and

(vii) Effective January 1, 1969, pension plans for bargaining unit employees at Elliot Lake were established containing provisions for supplementing pensions to certain minimum levels. The liability for these supplementary pensions is uncertain but was estimated initially at a maximum of $217,000 which is being funded at a rate of $30,000 per annum. Apart from this provision, the pension plans of the company are considered to be fully funded.

10. INCOME TAXES

Because the company did not claim depreciation or mine development expenses during the tax exempt periods of its mines, it has available sufficient of such expenses to eliminate taxable income for the year. A balance of unclaimed expenses is available which can be used to reduce future years' taxes, although the amount cannot be determined at the present time. The company does not intend to provide for income taxes so long as the accumulated amount of these expenses claimed for tax purposes is less than the accumulated amount recorded in its accounts.

Full provision has been made for Provincial mining taxes and the income taxes of subsidiary companies.

11. REMUNERATION OF DIRECTORS AND SENIOR OFFICERS

During the year ended December 31, 1969 the aggregate direct remuneration paid or payable by the company and its consolidated subsidiaries to the directors and senior officers of the company was $479,060.

12. DEPRECIATION AND AMORTIZATION

Provisions for depreciation and amortization relating to plant and equipment, mining properties and preproduction expenditures and other costs applicable to future periods were:

	1969	1968
Plant and equipment	$ 6,798,231	$ 6,965,530
Mining properties and preproduction expenditures	1,675,588	3,262,820
	8,473,819	10,228,350
Excess of cost over adjusted book value of assets acquired	1,047,100	1,047,100
	$ 9,520,919	$11,275,450

Comparative Consolidated Earnings by Divisions

YEAR ENDED DECEMBER 31, 1969

($000's omitted)

	1969	*1968*
MINING DIVISION:		
Revenue from mine production	$ 45,931	*$ 35,282*
Expenses:		
Cost of production and administration	27,230	*21,278*
Depreciation and amortization	3,606	*6,262*
Exploration expenditures	1,621	*1,257*
Minority interest in profits of subsidiary	585	*253*
Total expenses	33,042	*29,050*
Net earnings from operations before taxes	12,889	*6,232*
STEEL DIVISION		
Revenue from sales of steel and other products	127,183	*110,543*
Expenses:		
Cost of production, selling and administration	113,733	*100,578*
Depreciation	4,794	*3,903*
Amortization of excess of cost over adjusted book value of assets acquired	1,047	*1,047*
Minority interest in profits of subsidiary	3	*3*
Total expenses	119,577	*105,531*
Net earnings from operations before taxes	7,606	*5,012*
CORPORATE DIVISION		
Expenses:		
Costs of administration	3,042	*1,888*
Interest	2,560	*3,035*
Amortization of discount and financing expenses	162	*162*
Depreciation	74	*64*
Total expenses	5,838	*5,149*
Less investment and other income	2,267	*2,455*
Net expense for the year	(3,571)	*(2,694)*
NET EARNINGS FROM OPERATIONS BEFORE PROVISION FOR TAXES	16,924	*8,550*
Provision for taxes:		
Provincial mining taxes	685	*63*
Income taxes	878	*418*
	1,563	*481*
NET EARNINGS FROM OPERATIONS	15,361	*8,069*
Add extraordinary items	—	*4,943*
NET EARNINGS FOR THE YEAR	$ 15,361	*$ 13,012*

Report on Operations

Mining Division

The Mining Division earnings for the year before income and mining taxes were $12,889,000 compared to $6,232,-000 in 1968. Total revenue was $45,931,000 an increase of $10,649,000 compared to the previous year.

Revenue and earnings from uranium operations increased over 1968 primarily because of higher production partly offset by a lower average selling price. Improvement in production was a result of mining the higher grade New Quirke mine ore at a progressively higher rate. The low selling price applicable to production for delivery under the master Eldorado contract was in effect for the full year compared to the effect of this low price for slightly more than seven months in 1968; this was partly offset by relatively higher prices applied to production for the first deliveries to a number of Japanese utilities as well as to lesser quantities sold to other customers.

Total copper revenue and earnings were significantly higher than in 1968 as a result of the higher average selling price of copper and increased production. Average copper prices, particularly in the last six months of the year, were at a considerably higher level than in 1968 and despite higher operating costs made a substantial contribution to the profitability of copper operations.

Total production of copper for the year was about 4% better than in the previous year as a result of the continuation of improvement in copper grade at the Poirier property partially offset by lower production at both the Anglo-Rouyn and Pronto mines.

Uranium

Mining operations were carried on at the Old Quirke and New Quirke mines and all milling was at the enlarged Old Quirke mill. A total of 1,363,000 tons of ore was milled, a record for a single Rio Algom mine in the Elliot Lake area, compared to 1,167,000 tons in 1968 when production was adversely affected by a twenty-nine day strike. The average daily tons milled was 3,940 tons which is 6½% above the 3,700 tons per day rated capacity of the mill. The average recovered grade was 2.41 pounds of uranium oxide per ton and the recovery rate was 94.1% compared to 1.96 pounds of uranium oxide per ton and 93.3% recovery rate in the previous year.

A total of 3,290,000 pounds of uranium oxide was produced, including 157,000 pounds from underground leaching at the Nordic mine, compared to a total of 2,293,000 pounds in 1968. Deliveries totalling 3,185,600 pounds of uranium oxide were made including 2,006,000 pounds under the master contract to Eldorado Nuclear Limited, 998,800 pounds to a number of Japanese utilities, 125,300 pounds to Canadian Westinghouse Company Ltd. and 55,500 pounds for the Japanese Nuclear Ship.

In the first quarter the shaft facilities at the New Quirke mine, including ore and waste passes, underground crusher and pumping stations, and the semi-automatic electric railway for the haulage of ore from the new mine to the mill, were completed. During the year tests were conducted to determine the maximum milling rate with present equipment. These tests, the longest of which was over a twenty-one day period, demonstrated that a rate of 4,500 tons per day could be maintained by adjusting the grinding circuit to produce a coarser particle size without a significant loss in recovery. This additional capacity will be utilized as soon as the mines can support this rate of production. The feasibility of a further appreciable increase in mill capacity by additions to the present milling circuit is being studied.

In view of the planned increase in the productive capacity of the Quirke mill, it is unlikely that the Nordic mill will need to be re-activated in the near future. It is now planned to close the Nordic mine and put the surface plant on a care and maintenance basis. In this event, the underground leaching, the miner training program and experimental mining will be transferred from Nordic to the Old Quirke mine.

To alleviate a shortage of housing in Elliot Lake, one hundred building lots were purchased, and forty-three houses were moved from the shutdown mine properties and placed on lots. The necessary extensive rehabilitation and improvements to the houses have been completed.

A team from the Quirke mine won the annual Ontario Mine Rescue Competition over a field of thirty-nine teams representing most of the mines in the Province of Ontario.

Base Metals

Production from all base metals properties totalled 36,485,000 payable pounds of copper in concentrate and 1,688,000 payable pounds of zinc in concentrate

New higher grade copper ore was located and added to Mines de Poirier's reserves in northwestern Quebec.

Ore haulage by semi-automatic electric railway from New Quirke uranium mine to the Quirke mill just over a mile apart. The railway went into full operation in early 1969.

Championship Ontario mine rescue team stands before its home-base New Quirke mine headframe.

compared to 35,262,000 and 13,559,000 pounds respectively in the previous year. Production of zinc from the Poirier mine ceased in March.

Pronto Mine

The mill treated 242,000 tons of ore and 8,245,000 payable pounds of copper in concentrate were produced compared to 259,000 tons and 9,286,000 payable pounds of copper in concentrate in the previous year. Average mill head grade was 1.9%, the same as in 1968, and average mill recovery was 96.6% compared to 96.4% in the previous year.

In October, the milling time was reduced from seven to five days as the last of the orebody is being extracted from the fewer underground working places available. The remaining ore will be mined out and, after saleable equipment and materials are brought to the surface, the underground workings will be permanently closed. On completion of milling operations early in April, the plant will be placed on a care and maintenance basis.

Mines de Poirier Inc.

The production performance of this mine was the best since being brought into production in April 1966. The milling of 522,000 tons of ore, compared to 567,000 tons in 1968, yielded 18,601,000 payable pounds of copper in concentrate, 1,688,000 payable pounds of zinc in concentrate and 52,147 ounces of silver compared to 15,185,000 payable pounds of copper, 13,559,000 payable pounds of zinc and 47,869 ounces of silver respectively in the previous year. The mill head grade averaged 2.0% copper and average mill recovery was 93.9% compared to 1.5% and 92.8% respectively in 1968.

The mining of zinc-bearing ore was stopped in March when noxious gases generated by oxidation were encountered in the main stoping area. It is unlikely that the block of 259,000 tons of zinc ore left will be recovered. Copper stoping was accelerated to provide copper-bearing ore in sufficient quantity to fill the mill. Mining costs increased because of the accelerated stoping and the additional development work necessary to compensate for the lost zinc ore.

Since completion of the shaft deepening to 2,850 feet in 1968, development work has been carried out in the main ore zone from the 1,600 to 2,050 foot levels. In addition, during the year, development work was carried out in the west ore zone from the 1,150 to 1,600 foot levels. This work to date has been most encouraging in that widths and grades encountered are better than in the original ore reserve estimate. By the end of the year 60% of the mill feed was coming from cut and fill stopes and the balance from blast hole and development stopes, and the west zone was supplying about 25% of the ore trammed.

Anglo-Rouyn Mines Limited

This mine produced 9,639,000 payable pounds of copper in concentrate from the milling of 298,000 tons of ore compared to 10,791,000 payable pounds of copper and 280,000 tons of ore respectively in the previous year. The average mill head grade was 1.8% and average mill recovery was 96.0% compared to 2.1% and 96.1% in 1968. Production of silver and gold was 52,336 ounces and 10,330 ounces respectively.

In the early part of the year difficulty was encountered in mining in the main "A" zone where the lenses were found to be smaller and more fractured than indicated by drilling from the surface. The rate of production which could economically be sustained from this zone was reduced and additional ore was supplied from a surface pit on the "C" ore zone which was developed and in operation at mid-year. Approximately 75,000 tons of mill feed was supplied from the pit in the year and production from this operation was terminated in January 1970. The availability and development of this ore enabled the milling rate to be kept at the highest possible level but the mill head grade of the pit ore was considerably lower than from the mine and resulted in an overall lower average grade.

Late in the year a decision was taken to develop and mine ore reserves to the west of the present workings. An incline is being driven from underground to the southwest extension of the orebody and an incline is being driven from surface to the underground "C" zone. Trackless equipment is being used for this development. Mining in these two areas will begin in 1970.

The shortage and turnover of underground labour persist. Training courses for local residents have been successfully conducted in co-operation with the Provincial and Federal Governments.

Exploration

The Company and its subsidiaries' net expenditure on exploration in 1969 was $1,621,000 compared with $1,257,000 in 1968 and $1,026,000 in 1967. The long-term exploration programs initiated in 1967 were continued and extended in the search for uranium and base metals in Canada and the United States.

The search for uranium continued in the Elliot Lake area with deep drilling in progress throughout most of the year. The major exploration project in Northern Quebec being carried out in conjunction with Soquem (the Quebec Government sponsored exploration company) continued. Although the prospects continue to be encouraging, nothing of economic significance has yet been discovered. Exploration and drilling were carried out in 1969, in partnership with Mitsubishi Metal Mining Company, in certain regions of Wyoming and the program will continue in 1970. An aggressive uranium exploration program is also being conducted in the western and southwestern areas of the United States, primarily in Utah, Wyoming and New Mexico.

The long-term program in British Columbia directed toward identification of porphyry copper mineralization was continued on both reconnaissance and detail scale in 1969. The work involved exploring most areas with the aid of helicopters and using geochemical, geological and geophysical techniques followed by diamond drilling to test zones of potential interest. In partnership with Mitsubishi Metal Mining Company certain areas which have been defined will be investigated further and general reconnaissance will continue. Base metals programs were also carried out on prospects in northern Saskatchewan, Manitoba, Ontario, Quebec, the Maritimes and in the southeastern United States.

Early in the year a major search for coking coal was launched in the eastern foothills of the Rocky Mountains. Several large tracts of land were acquired through concessions and options. These properties were explored on a preliminary basis in the summer months.It is planned to expand the program in 1970.

Research and Development

In 1969 the research and development programs were directed primarily toward reducing mine and mill costs and to increasing productivity. Mining methods have been re-examined in detail. A different mining method for the Elliot Lake operations which, if successful, will reduce costs and increase the ore which can be recovered from the mines, has been devised and will be tested at the New Quirke mine in 1970. A number of beneficiation techniques have been under investigation, primarily for Elliot Lake, with particular attention applied to various ore sorting methods and to concentration by heavy media cyclones.

Technical and analytical services were provided on a continuing basis to operating departments as required. Programs were also directed to improvements in mine ventilation, various recovery process steps and control of mill waste products.

Employee Relations

At December 31, 1969 there were 1897 employees in the Mining Division (including all consolidated subsidiaries) of whom 1388 were production workers and 509 were engaged in executive, technical, administrative and clerical functions.

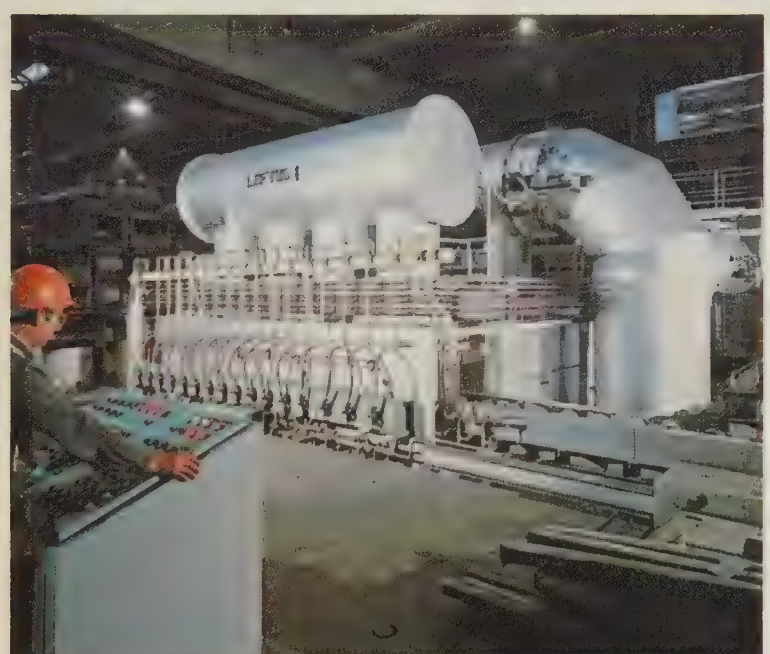
Employee relations were good throughout the year and there were no strikes or work stoppages. In June a labour contract was entered into with hourly-rated employees of the Pronto mine which will be in effect until June 1970 by which time operations will have ceased. The collective agreements for Elliot Lake employees will expire in 1970; the one covering the majority of hourly-rated employees will end on May 15, 1970. The agreement with hourly-rated employees of the Anglo-Rouyn copper mine will continue in effect until November 30, 1970. The term of the agreement with the production workers of Mines de Poirier is to December 1971.

There is an increasing shortage of skilled miners in the Elliot Lake area due mainly to major expansion in nickel mining in the Sudbury area. It is planned to accelerate the miner training program initiated in 1969. The program involves training men with no previous mining experience in co-operation with Federal and Provincial Governments.

Steel Division

The Steel Division earnings before income taxes for 1969 were $7,606,000 as compared with $5,012,000 in 1968, which is an increase of $2,594,000 or 51.8%. The profits in each year are stated after deduction of $1,047,000,

Red hot ingot is removed from one of Atlas Steels' five new "soaking pits" at the Welland plant. The pits heat steel prior to further processing.



Installation of "walking beam" furnace improves Atlas Steels' Welland production mill versatility.
Toronto's new 784-foot high Commerce Court tower will be the largest and tallest building in the world with an all stainless steel curtain wall exterior. The wall will incorporate over 2 million pounds of Atlas stainless steel.

representing the annual charge for amortization of the excess of acquisition cost over adjusted book value of the Atlas Steels assets purchased as at December 31, 1962.

Demand for all products was at a high level throughout the year. Total sales, including metal products purchased by warehouse subsidiaries for resale, increased by 15.1% over 1968 to a new high of $127,183,000. The higher revenue was contributed mainly by the increased proportion of hollow drill and branded machinery steels produced by the Welland plant and further significant increases in the sale of stainless flat rolled products from the Tracy plant.

Higher volume and better mix, both of products and markets, together with some price increases, combined to offset higher costs and maintain the earnings of the Welland plant and to substantially improve earnings of the Tracy plant. Sales and earnings of warehousing operations. both domestic and international, increased substantially.

Sales and Marketing

Market development activities were concentrated heavily on stainless products in the domestic area. One important tangible result of these activities is the decision of the owners and architects to specify our specially developed "Imperial" finish stainless steel for the curtain wall of the new Canadian Imperial Bank of Commerce building in Toronto. This building will be the largest and tallest in the world incorporating an all stainless steel curtain wall exterior.

The domestic warehouse selling effort was re-organized to provide additional specialized selling and handling of specialty steel products. This, together with the heavy demand, resulted in a considerable improvement in sales and a continuing strong order backlog for the domestic warehousing operation. A new Atlas Alloys metals service centre in Montreal is scheduled to commence operations in April 1970.

Progress continued in development of specialty steel sales in the United States and resulted in a decision to open a second steel service centre in that country. The facility in Detroit commenced operations in March 1970.

Titanium sales recovered from the fall-off encountered in 1968 and sales in 1970 are expected to continue on an upward trend. The markets for these products continue to depend largely upon the supersonic air transport and defence-oriented activities.

Manufacturing

For the year 1969 as a whole, stainless flat rolled production at Tracy exceeded that of the previous year by 30% despite the nickel shortage throughout the latter half of the year. Although it was necessary to cut back production of high nickel-bearing steels, overall schedules were maintained at both the Welland and Tracy plants by substitution, with customers' approval, of lower nickel steels, reducing nickel-bearing in-process inventories to an absolute minimum, conservation programs such as recovery of nickel from grindings, purchase of nickel-bearing scrap at premium cost and deferments or substitution where possible of nickel-bearing products in favour of non-nickel-bearing items.

The Welland plant operated at full capacity throughout the year and improvement in product mix was better than planned. Progress on the facilities rehabilitation program which was initiated in 1967 to support the long-range profit objectives for the Welland plant, continued and several major units were commissioned during the year. Five new soaking pits at the blooming mill for heating of ingots and slabs to rolling temperatures will increase ingot and slab supply to the blooming mill and at the same time provide better heat control and improved production flow in the primary areas of melting and blooming mill operations. Additional heating and dispositioning furnaces located in the billet and bar operations will speed in-process heat treatment, increase production, and improve bar product quality. A new 54,000 sq. ft. building for the expansion of the cold draw operation was completed and operation is scheduled for the first half of 1970 after equipment is installed. This new facility will greatly improve the company's capability for making bar products, output will be increased and, in addition, dimensional accuracy, surface finish and physical properties will reach new high standards of quality. The Welland plant rehabilitation and modernization program will continue in 1970 and several subsequent years.

Research and Development

In 1969 the research and development program continued its emphasis towards improved or new specialty

Silhouetted against overcast sky, construction worker prepares material for use in Atlas Alloys' new Montreal service centre.

Atlas Alloys' newly-installed Blanchard grinder at its Etobicoke service centre is prepared for operation. Its 60-inch diameter table permits the grinding of exceptionally large steel blocks to customer specification.

steel products. As a result of work in previous years, culminating in 1969, technological improvements in the manufacture of free-machining stainless steel have provided support to marketing and sales programs. The start-up of new equipment for the processing of high speed steel coils has resulted in quality improvements. Two new grades of hollow drill mining steel are undergoing field trials. Three product programs initiated in 1969 cover a new tool steel, a new high strength stainless steel and a new die mould alloy.

In the area of new processes, work commenced on a large scale to explore electroslag remelted steel with early indications of improved surface quality and ingot yield. Preliminary studies were completed which provide a base from which planning will proceed for the up-dating of the melting facilities at the Welland plant.

A number of other programs, both of research and new product development, are underway and increased funds are being provided for carrying forward these programs in 1970.

Employee Relations

The Steel Division employed 3,570 people at December 31, 1969, of whom 2,299 were engaged in production, 609 were engaged in sales and marketing, and 662 were performing executive, administrative or clerical functions.

During the year programs of personnel and management development received great emphasis and organizational attention. Modern training facilities and the latest in audio-visual equipment were provided. Programs were continued and broadened to provide our employees development and educational opportunities through tuition refund, in-plant metallurgical courses, apprenticeship, and graduate trainee programs. A management conference program was undertaken to aid and encourage the development of management skills and effectiveness and to help develop, communicate and implement policies of the company.

The agreement between the company and the United Steelworkers of America representing the office and technical employees at the Welland plant and offices expired on December 31, 1968. Negotiations were broken off by a strike of approximately two months before a new agreement covering a period of three years was signed. Production continued at normal levels throughout the period.

The agreement with the office employees at the Tracy plant expired on January 31, 1969, and a two-year agreement was signed after a short work stoppage by office employees. Production continued without interruption.

The labour contract covering hourly-rated employees of Tracy who are members of the United Steelworkers of America expired on November 30, 1969. A new three year contract has been successfully negotiated. The termination date of the new contract will be November 30, 1972.

The labour contract between the Company and the Canadian Steelworkers Union which represents the hourly-rated employees at Welland, expired on February 17, 1970. The United Steelworkers of America, C.I.O., petitioned the Ontario Labour Relations Board for a vote of hourly workers at the Welland plant to determine whether the C.I.O. or the incumbent Canadian Steelworkers Union will represent the employees in the future. Following a hearing conducted by an examiner for the Board, an election was held in early February. Contract negotiations are delayed pending results of the elections which are not known at this time.

Rio Algom Divisions and Affiliates

Canada

MINING

Head Office—Toronto, Ontario
Operating properties in Elliot Lake area; Old Quirke, New Quirke and Pronto
Anglo-Rouyn Mines Limited, La Ronge, Sask.
Mines de Poirier Inc., Joutel, Quebec
Lornex Mining Corporation Ltd., Vancouver, B.C., Property at Ashcroft, B.C.

EXPLORATION

Rio Tinto Canadian Exploration Limited, (Riocanex)
Head Office—Toronto, Ontario
Branch Offices—Vancouver, B.C., Noranda, P.Q.

STEEL

Atlas Steels Company, Head Office—Welland, Ontario
Plants at Welland, Ontario and Tracy, Quebec

METAL DISTRIBUTION

Atlas Alloys, Head Office—Toronto, Ontario
Service Centres at Toronto, Etobicoke, Winnipeg, Montreal, Windsor, Edmonton, Vancouver

United States

MINING

Rio Algom Corporation, Wilmington, Delaware
Property at Moab, Utah

EXPLORATION

Rioamex, Division of Atlas Alloys Inc., Cleveland, Ohio

METAL DISTRIBUTION

Atlas Alloys Inc., Head Office—Cleveland, Ohio
Service Centres at Cleveland, Ohio, Detroit, Mich.

Overseas

METAL DISTRIBUTION

Atlas Steels (England) Limited, Luton, England
Atlas Steels (Australia) Pty. Limited, Melbourne, Australia
Atlas Steels S.A., Lausanne, Switzerland
Aceromex-Atlas S.A., Mexico City, Mexico
Agents or Distributors in other countries

Principal Associates

Canada

British Newfoundland Corporation Limited
Churchill Falls (Labrador) Corporation Limited
1 Viking Road, St. John's, Newfoundland

United Kingdom

The Rio Tinto-Zinc Corporation Limited
Anglesey Aluminium Limited
Imperial Smelting Corporation Limited
R.T.Z. Metals Limited
6 St. James's Square, London, S.W.1
Capper Pass & Son Limited
Melton Works, North Ferriby, Yorkshire
Borax (Holdings) Limited
Borax House, Carlisle Place, London, S.W.1

Commonwealth of Australia

Conzinc Riotinto of Australia Limited
The Zinc Corporation Limited
New Broken Hill Consolidated Limited
The Broken Hill Associated Smelters Pty. Limited
Sulphide Corporation Pty. Limited
Comalco Industries Pty. Limited
Hamersley Iron Pty. Limited
Mary Kathleen Uranium Limited
Bougainville Copper Pty. Limited
95 Collins Street, Melbourne, 3000

Republic of South Africa

Rio Tinto Holdings Limited
Palabora Mining Company Limited
P.O. Box 61140, Marshalltown, Transvaal

United States of America

Rio Tinto-Zinc Corporation of America
The Pyrites Company, Inc.
P.O. Box 1188, Christina Avenue
Wilmington, Delaware 19899
Alloys and Chemicals Corporation
4365 Bradley Road, South West
Cleveland 9, Ohio 44109
Ireco Chemicals
3000 West 8600 South, P.O. Box 77,
West Jordan, Utah 84084
United States Borax & Chemical Corporation
3075 Wilshire Boulevard, Los Angeles
California 90005

Spain

Compañia Española de Minas de Rio Tinto, S.A.
Alcala 95, Madrid 9

Japan

Rio Tinto-Zinc (Japan) Limited
Shin Toyko Building,
2, 3-Chome, Marunouchi, Chiyoda-Ku,
Toyko 100

Miscellaneous Corporate Information

Head Office

120 Adelaide St. West, Toronto 1, Ontario, Canada

Principal Bankers

Canadian Imperial Bank of Commerce, Toronto
Toronto-Dominion Bank, Toronto
First National City Bank, New York

Solicitors

Fasken & Calvin, Toronto
Strasser, Spiegelberg, Fried & Frank, New York

Auditors

Coopers & Lybrand, Chartered Accountants, Toronto

Registrars and Transfer Agents

Common Shares

Canada Permanent Trust Company,
Toronto, Montreal, Winnipeg, Calgary
and Vancouver

The Canadian Bank of Commerce Trust
Company, New York

Preference Shares and Series "C" Warrants

Canada Permanent Trust Company,
Toronto, Montreal, Halifax, Winnipeg
and Vancouver

Shares Listed

Toronto Stock Exchange, Toronto
Montreal Stock Exchange, Montreal
American Stock Exchange, New York

Printed in Canada

Rio Algom
Rio Tinto

Rio Algom Mines Limited